

**Iowa Department of Natural Resources
Natural Resource Commission**

ITEM

10

DECISION

TOPIC

**Agreement with Iowa State University – Effects of Common Carp
and Zebra Mussels on Clear Lake**

Approval is requested for the Department of Natural Resources Department to enter into an agreement with Iowa State University (ISU) to conduct a study of the effects of introduced common carp and invading zebra mussels on water quality and the native fish, invertebrate, and plant communities in Clear Lake. The study will fully utilize data from the Carp Radio-Telemetry Study and other existing data sources. The knowledge gained from this study will be organized into a simulation model that will enable prediction of the effects of both biotic and abiotic factors on water quality in Clear Lake, and facilitate evaluation of a variety of scenarios and management alternatives for future water quality.

The study will be conducted over a 4-year period at a total cost of \$369,771 (\$258,000 DNR direct costs and \$111,771 ISU contributed indirects). Direct costs for the first year (FY08) total \$64,500, which will be funded by DNR Fisheries Invasive Species (15%), Lake Restoration (55%), and Watershed Monitoring and Assessment (30%).

Although the immediate goal is to produce a model for Clear Lake, the model will also be useful in similar lakes. Small eutrophic lakes with abundant common carp are the most difficult to manage for consistently good water quality, and a simulation model that works for Clear Lake will likely be transferable to comparable systems. The final goal of this study is to obtain baseline data on carp, zebra mussels, and the native biological community in Clear Lake for the purposes of long-term monitoring and future testing and refining of the simulation model.

We recommend that the Department enter into an agreement with Iowa State University for this research project.

Kenneth Herring
Division Administrator
Conservation and Recreation Division

March 8, 2007